

ABSTRACT

In this research, we made gluten-free dried pumpkin noodle, using fermented cassava as texturing agent. This study aims to determine the effect of water proportion in gel; and proportion of gel to pumpkin flour, on textural characteristics, cooking quality, and sensory properties of the noodle. The experimental design used was complete randomized factorial design (RALF) by 2 factors, namely flour to water proportion in gel (1: 4, 1: 5, w/w) and ratio of gel to flour (1: 1, 1: 1.1, 1: 1.2, w/w). Texture was studied using a texture analyzer, and cooking quality was evaluated using standard method. A hedonic sensory test was performed by employing 25 untrained panelists for evaluating preference toward colour, aroma, taste, mouthfeel, overall preference, from 1 (dislike very much) to 9 (like very much). The results showed that the proportion of water significantly affected cooking time and water absorption, while the proportion of flour significantly affected cooking time, hardness, cohesiveness, gumminess, chewiness and resilience. Preference for colour ranged from 4.240 to 5.560, aroma 4.240 to 4.920, flavor 3.120 to 5.040, mouthfeel 4.040 to 4.720 and the overall preference 3.720 to 5.200. Cooking time ranged from 3.1 to 3.5 minutes, cooking loss ranged from 14.536 to 18.994% and water absorption ranged from 72.491 to 90.662%. Hardness was 2.122 to 3.684 g hardness, adhesiveness - 1.231 to 28.185, springiness 0.891 to 0.922, cohesiveness 0.638 to 0.733, gumminess 1.354 to 2.402 to, chewiness 1.611 to 2.215, and resilience 1.137 to 1.354.

Keywords : *Pumpkin, dried noodle, sensory, cooking quality and textural characteristics.*

ABSTRAK

Pada penelitian ini dilakukan pembuatan produk mi kering berbahan dasar dari labu kuning. Labu kuning yang masih mentah diolah menjadi produk tepung yang berguna sebagai pengganti tepung terigu. Pembuatan mi kering labu kuning membutuhkan adanya modifikasi bahan berupa penambahan tepung singkong termodifikasi dengan tepung labu kuning, karena bahan tersebut tidak mengandung gluten. Penelitian ini bertujuan untuk mengetahui proses pembuatan mi kering dan mendapatkan nilai uji sensoris, *cooking quality* serta tekstural mi kering labu kuning. Rancangan percobaan yang digunakan adalah Rancangan Acak Lengkap Faktorial (RALF) dengan 2 faktorial diantaranya penambahan proporsi tepung singkong termodifikasi dengan air (1:4, 1:5) dan gel dengan proporsi tepung (1:1, 1:1,1, 1:1,2). Pengujian dilakukan secara sensoris, *cooking quality* dan tekstural menggunakan alat berupa texture analyzer. Hasil penelitian menunjukkan bahwa proporsi air berpengaruh nyata terhadap *cooking time* dan *water absorption* sedangkan proporsi tepung berpengaruh nyata pada *cooking time*, *hardness*, *cohesiveness*, *gumminess*, *chewiness* dan *resilience*. Pada pengujian sensoris diperoleh nilai parameter warna berkisar antara 4,240-5,560, aroma 4,240-4,920, rasa 3,120-5,040, tekstur 4,040-4,720 dan keseluruhan 3,720-5,200, dari semua parameter diperoleh hasil skala hedonik panelis lebih (tidak suka - agak suka) terhadap produk mi kering labu kuning. Pengujian *cooking quality* pada parameter *cooking time* berkisar 3,1-3,5 menit, *cooking loss* berkisar 14,536-18,994% dan *water absorption* berkisar 72,491-90,662%. Pengujian tekstural diperoleh hasil tertinggi pada parameter *hardness* 2,122-3,684 g, *adhesiveness* - 1,231-28,185, *springiness* 0,891-0,922, *cohesiveness* 0,638-0,733, *gumminess* 1,354-2,402, *chewiness* 1,611-2,215, dan *resilience* 1,137-1,354.

Kata kunci : *Labu kuning, mi kering, sensoris, cooking quality dan tekstural.*